

ABSTRACT OF THE DISCLOSURE

A method of manufacturing a semiconductor integrated circuit device having nonvolatile semiconductor memory devices includes the following steps (a) to (k): (a) A step of forming an element isolation region, (b) a step of forming a first gate insulating layer and a laminate including a first conductive layer for a word gate and having a plurality of openings extending in a first direction, (c) a step of forming second gate insulating layers, (d) a step of forming side insulating layers on both sides of the first conductive layer, (e) a step of forming a second conductive layer over the entire surface, (f) a step of forming a first mask layer at least in a region in which a common contact section is formed, (g) a step of anisotropically etching the second conductive layer, thereby forming first and second control gates in the shape of sidewalls and forming a contact conductive layer at least in a region in which the common contact section is formed, (h) a step of forming an impurity diffusion layer which forms either a source region or a drain region, (i) a step of forming a buried insulating layer which covers the control gate, (j) a step of forming a second mask layer in a region in which the common contact section is formed, and (k) a step of patterning the first conductive layer for the word gate.

A METHOD OF MANUFACTURING A SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE HAVING NONVOLATILE SEMICONDUCTOR MEMORY DEVICES